

**Chang, Andy**

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**From:** Bridgers, George  
**Sent:** Thursday, February 04, 2016 10:00 AM  
**To:** Chang, Andy; Summerhays, John; Portanova, Mary; Robinson, Randall  
**Cc:** Blakley, Pamela; Thurman, James; Brode, Roger; Fox, Tyler; Jones, Rhea  
**Subject:** FW: Use of the LOWWIND3 Option with AERMOD

FYI... this is the email exchange with Cindy Langworthy that I referenced in my email from a few moments ago.

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**From:** Bridgers, George  
**Sent:** Tuesday, January 19, 2016 1:51 PM  
**To:** Avey, Lance <Avey.Lance@epa.gov>; Biton, Leiran <biton.leiran@epa.gov>; Blakley, Pamela <blakley.pamela@epa.gov>; Bohnenkamp, Carol <Bohnenkamp.Carol@epa.gov>; Bohning, Scott <Bohning.Scott@epa.gov>; Colecchia, Annamaria <Colecchia.Annamaria@epa.gov>; Dresser, Chris <Dresser.Chris@epa.gov>; Feldman, Michael <Feldman.Michael@epa.gov>; Fry, Jessica <fry.jessica@epa.gov>; Gillam, Rick <Gillam.Rick@epa.gov>; Hawkins, Andy <hawkins.andy@epa.gov>; Holladay, Cleveland <Holladay.Cleveland@epa.gov>; Howard, Chris <Howard.Chris@epa.gov>; Kay, Rynda <Kay.Rynda@epa.gov>; Krivo, Stan <Krivo.Stanley@epa.gov>; Langman, Michael <langman.michael@epa.gov>; Leon-Guerrero, Tim <Leon-Guerrero.Tim@epa.gov>; Leslie, Michael <leslie.michael@epa.gov>; Liljegren, Jennifer <Liljegren.Jennifer@epa.gov>; Lusky, Katy <Lusky.Kathleen@epa.gov>; Matichuk, Rebecca <Matichuk.Rebecca@epa.gov>; Mohr, Ashley <Mohr.Ashley@epa.gov>; Monteith, Richard <Monteith.Richard@epa.gov>; Nguyen, Phuong <Nguyen.Phuong@epa.gov>; Persoon, Carolyn <persoon.carolyn@epa.gov>; Portanova, Mary <portanova.mary@epa.gov>; Robinson, Randall <robinson.randall@epa.gov>; schmidt, howard <schmidt.howard@epa.gov>; Schwartz, Colin <Schwartz.Colin@epa.gov>; Snyder, Erik <snyder.erik@epa.gov>; Tonnesen, Gail <Tonnesen.Gail@epa.gov>; Walther, Katherine <Walther.Katherine@epa.gov>; Wiley, Adina <Wiley.Adina@epa.gov>; Worstell, Aaron <Worstell.Aaron@epa.gov>  
**Cc:** Owen, Chris <owen.chris@epa.gov>; Thurman, James <thurman.james@epa.gov>; Brode, Roger <brode.roger@epa.gov>; Fox, Tyler <fox.tyler@epa.gov>  
**Subject:** FW: Use of the LOWWIND3 Option with AERMOD

Regional Office Modelers,

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(b) (5) [REDACTED]

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[REDACTED]

[REDACTED]

**From:** Bridgers, George  
**Sent:** Thursday, January 14, 2016 12:25 PM  
**To:** 'clangworthy@hunton.com' <[clangworthy@hunton.com](mailto:clangworthy@hunton.com)>  
**Cc:** Fox, Tyler <[Fox.Tyler@epa.gov](mailto:Fox.Tyler@epa.gov)>; Wayland, Richard <[Wayland.Richard@epa.gov](mailto:Wayland.Richard@epa.gov)>  
**Subject:** RE: Use of the LOWWIND3 Option with AERMOD

Chet forwarded along your message and questions regarding the timing of the Appendix W final rulemaking package and the interim use of the LOWWIND3 beta option. So, I am responding to those questions on his behalf and extend his well wishes of the new year to you, as well.

To your first question, we are still on track to complete the Appendix W rulemaking this spring. We are currently engaging with OMB on their determination of whether rulemaking advances as non-significant without formal interagency review. If OMB determines that the final rulemaking is significant, then there will be at least a 3 month delay in the schedule beyond June. At the time of final rule signature, we will provide a full release of an updated AERMOD Modeling System that will be the EPA preferred regulatory version along with all of the supporting guidance documentation that was included in the proposed rulemaking docket.

So far as the usage of beta options in AERMOD in the interim, we must adhere to the Use of Alternative Models Section (Section 3.2) in the current Appendix W for their use in regulatory applications. This is further explained in our December 10th, 2015 Clarification Memorandum

([http://www.epa.gov/ttn/scram/guidance/clarification/AERMOD\\_Beta\\_Options\\_Memo-20151210.pdf](http://www.epa.gov/ttn/scram/guidance/clarification/AERMOD_Beta_Options_Memo-20151210.pdf)). Specific to LOWWIND3, this beta option really only has one pathway for appropriate Regional Office approval with Model Clearinghouse concurrence. That pathway (condition #2 as listed in Section 3.2.2(b)) is one in which a case specific statistical performance evaluation is conducted. In a case specific statistical performance evaluation, air quality modeling for the facility in question would have to be evaluated against representative air quality monitors that are in close proximity to the facility. Unlike the ADJ\_U\* beta option that can, as you said, focus on the appropriateness of the use of the option in the particular situation, LOWWIND3 has not yet fully received scientific peer-review (criteria "i" for condition #3 of Section 3.2.2(e)) and requires more rigor in its approval as an alternative model. We have also received a number of public comments specific to this proposed options and are working to complete our review of those comments and then finalize the appropriate LOWWIND option with the necessary journal articles for LOWWIND3 or updated version accepted for peer-review as part of final Appendix W rulemaking package.

To note, there is peer-reviewed literature to which applicants can reference for ADJ\_U\*, which makes the alternative model approval for that particular beta options to be a fairly low hurdle. We are also in the process of finalizing an ADJ\_U\* Model Clearinghouse concurrence with Region 10 and will soon do the same with a similar situation in Region 4. Both situations can serve as excellent roadmaps for anyone considering the use of ADJ\_U\* prior to finalization of Appendix W later this Spring.

For the client that you were seeking clarification on the use of the LOWWIND3 beta option in AERMOD, we can certainly help arrange a coordination / collaboration conference call between the appropriate Regional Office, state/local agency, and the Model Clearinghouse to explore the options for their situation. That meeting would allow for necessary discussion and informed advise on best approach that could satisfy the needs prior to signature on the Appendix W rulemaking.

My regards,  
George

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**From:** Langworthy, Cindy [<mailto:clangworthy@hunton.com>]  
**Sent:** Wednesday, January 13, 2016 12:56 PM  
**To:** Wayland, Richard <[Wayland.Richard@epa.gov](mailto:Wayland.Richard@epa.gov)>  
**Subject:** Use of the LOWWIND3 Option with AERMOD

Happy New Year, Chet!

I have a client who wants to use the LOWWIND3 option in AERMOD to permit a new source. That leads me to a couple of questions. First, when do you anticipate that the revisions to the Modeling Guideline will be finalized, so that LOWWIND3 will (hopefully) be part of the preferred version of AERMOD?

Second, if the client needs to use the LOWWIND3 option prior to that event, I understand that an alternative model demonstration will be required. I believe that I heard you say when the NAAQS Implementation Coalition met with EPA, though, that that demonstration would need to focus on the appropriateness of the use of the option in the particular situation, rather than the technical merits of the LOWWIND3 option. My understanding is that further validation work would not be required in an alternative model demonstration. Is my understanding correct? Would it be helpful to talk about this? If so, should I loop in the client and when would be a good time to chat?

Thanks. -- Cindy



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